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ABSTRACT

The problems and accomplishments of a program to evaluate the Writing Across the Curriculum (WAC) program at Walsh College in Canton (Ohio) are described. The college-wide writing program began in 1987 with training workshops for faculty. Stage 1 of the program ended in 1988 with a summative evaluation and the development of a handbook to be used by future participants in the program. Three guiding questions to evalute Stage 1 addressed whether or not: (1) student writing improves in the WAC courses; (2) student learning improves in the WAC courses; and (3) the evaluation forms are effective. Eleven faculty members participated in Phase 1 of the WAC program. The summative evaluation of this phase was conducted through student comments and interviews, faculty comments and interviews, and student grades. Student writing and learning did improve in the WAC and after the program. Faculty also found the experience to be positive. It became apparent that effective evaluation depended on the interest and commitment of the faculty members, and their clear understanding of the process from its inception. Future WAC instructors need to plan the evaluation as a first and essential part of the planning. Appendix A includes the faculty evaluation questionnaire; and Appendix B is a chart of evaluation considerations. (SLD)

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Evaluating Writing Across the Curriculum: Struggles and Insights

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Introduction

For over a year now my colleagues and I have been in the process of evaluating the Writing Across the Curriculum program at Walsh College. We have interviewed and spoken to students and faculty and gathered data when available. Although the program has been in place for only a year and a half, the problems of evaluation are apparent. I would like to report on the struggles and insights we have gained in the process of evaluating the effectiveness of the program.

Background and Objectives

Interest in Writing Across the Curriculum(WAC) at Walsh College began as the result of faculty concern about students' apparent lack of critical thinking and writing abilities. Since 1983, the college has provided both time and financial support to develop a college wide writing program. From 1983-1985 a number of information and training workshops were given on campus. A Writing Center was established on the campus in 1984. During the 1985-1986 school year, a survey was conducted to determine faculty perceptions about student writing(see Appendix A). Results showed faculty perceive students unable to develop ideas and communicate understanding of content in writing. Faculty also reported they needed support in developing their own writing assessment skills.

Although the idea of a college wide writing program originated in the English department, a Writing Committee was

established during the 1986-87 school year to direct the writing program on a college wide level and to develop a five year plan. Also that year Walsh received a grant from the Gund Foundation to establish a Presidential Endowment Fund for Faculty Development. The grant specified that "income from the Presidential Endowment Fund will be used to foster academic excellence," initial monies to be "used to underwrite a 'Writing Across the Curriculum' project."

In response to the challenge to foster academic excellence, the Writing Committee proposed a pilot program of Four Stages. The goals of the program were to improve student writing and to provide a curriculum that would have each student take three writing intensive courses before graduation. Stage One of the pilot program began in the summer of 1987 with training workshops for volunteer faculty. Thirty faculty attended the two day workshop; eleven faculty were chosen to participate for the 1987-1988 academic year. Eleven faculty and the director of the program met bi-monthly throughout the year to discuss and plan course material. Stage One ended in the spring of 1988 with a summative evaluation and the development of a handbook to be used by future participants in the program.

Three guiding questions were developed to determine the effectiveness of Stage One. These questions also reflected faculty concerns expressed in the Faculty Survey in 1985-1986. The three questions were:

Did student writing improve in the WAC courses?

Did student learning improve in WAC courses?

Were evaluation forms effective?

The purpose of this paper is to discuss the method of evaluation used and the struggles and insights encountered in finding data to answer the three guiding questions used to evaluate Stage One.

Perspectives

Two areas of interest are discussed in the literature in relation to the effectiveness of a Writing Across the Curriculum program. One area is the evaluation of the program. The other is the evaluation of writing effectiveness.

Evaluation of the Program

Russell(1987) and Fulwiler(1984) acknowledge that cross-curriculum writing instruction goes against the grain of the modern university with its research orientation, specialized elective curriculum and insular departmental structure. Russell reviews past successes and failures of Writing Across the Curriculum programs and then presents three conclusions about the options for survival. First, WAC needs to be part of an institution wide plan. Second, programs require funding to purchase faculty time dedicated to WAC and reasonable class size. Finally, WAC programs require patience(Russell, 1987, p. 191).

Morrow(1986) states a successful WAC program includes support from administration, adequate funding, regular faculty developmental workshops, adequate faculty training and the use of

a Writing Center to support WAC.

In general, the consensus seems to be that successful WAC programs require support by the institution. The literature is less clear concerning evaluating the effectiveness of the writing itself.

Evaluation of Writing Improvement

Successful WAC programs "...require(s) evaluation designs that are internal as well as external, formative as well as summative"(Sipple, 1986, p. 4). Sipple suggests that evaluation designs be part of the initial planning. She reports Young said in a faculty seminar that more time was needed in the beginning to plan the evaluation. Sipple suggests that multiple measures are needed to demonstrate substantive conclusions and verification that are worthy of the program. She suggests a matrix of evaluation activities and suggests both qualitative and quantitative measures are needed. The matrix includes what is to be evaluated, for example effectiveness of targeted courses. Kinds of evaluation are also included in the matrix such as faculty surveys and analysis of class visits.

Fulwiler(1984) asks the question "How Well Does Writing Across the Curriculum Work?" Like Sipple, he discusses the wide range of factors influencing changes in writing behavior. But he also indicates that improvement in writing ability is related to all sorts of social, intellectual and emotional domains that involved the entire campus(p. 120). He notes these are difficult

to measure. He suggests that workshops are explorations rather than conclusions about what works. He states this use of an opened ended model of discussion rather than evaluation stimulates discussion and informs all the faculty. He notes that community of scholars was established at his institution and the environment about writing and teacher writing changed.

Davis, Scriven and Thomas(1987) discuss the evaluation of composition instruction and suggest both formative and summative evaluation and the use of holistic and analytic evaluation. They provide a comprehensive discussion of the needed elements of a writing evaluation. Some of these elements include student writing performance, student attitudes and beliefs about writing, other student indicators such as enrollment, teachers' attitudes and beliefs about writing, training activities and the program administration. The evaluation methods include observation, surveys, student grades, locally developed tests and self and peer assessment.

The experts seem to suggest the use of comprehensive evaluation techniques that include quantitative and qualitative methods and both formative and summative evaluations. General curriculum models also offer some insight into the use of observation and description for evaluation of programs.

General Curriculum Evaluation Models

In the education field, various curriculum evaluation models exist that may be applied to evaluating a writing program. For

example, illuminative evaluation is not a methodological package but a general research strategy(Parlett and Hamilton, 1976). There are three stages: observe, inquire further, seek to explain. Information is assembled using data from four areas: observation, interviews, questionnaires and tests and background sources. No method is used exclusively; different techniques are used to throw light on a problem. Besides viewing the problem from a number of angles, this triangulation approach facilitates the cross-checking of otherwise tentative findings.

Naturalistic inquiry(Guba, 1978) is an evaluation strategy aimed at describing generalization about reality. Phenomena are investigated in the natural setting. This type of evaluation depends on a "slice-of-life" approach. Episodes document how people feel, what they know, how they know it and what their perceptions and concerns are. Through observation, discoveries are made and then verified.

Like naturalistic inquiry, responsive evaluation(Stake, 1974) is based on observation of the program and reaction to what is observed. It is an attempt to respond to the natural ways in which people assimilate information and arrive at understanding. The approach is not new, but has been avoided because it is subjective. A responsive evaluation orients to the program activities rather than the outcomes and responds to the requirements for information. Different value perspectives are referred to in reporting the success or failure of the program.

writing. These courses included undergraduate courses in music, biology, sociology, business, communication, theology, psychology and one graduate course in education. An evaluation matrix was developed to guide the summative evaluation(see Appendix B). There was no attempt to do formative evaluation through the year. However, the bi-weekly discussion did often include evaluative areas.

For the summative evaluation, three sources of information were used: written comments and interviews from students in the WAC courses, written comments and interviews from faculty teaching the WAC courses and grades of students throughout the semester.

Each faculty member was asked to collect written comments. Two members of the pilot project responsible for evaluation interviewed faculty and students. Faculty submitted their comments and grades for each student to the two members of Pilot Project co-ordinating the evaluation. Not all faculty members submitted students' comments or grades.

Each of these sources of information was then compared for similarities and differences, a type of triangulation method. Because of the subjective nature of written comments and interviews, some of the information may appear "fuzzy." However, repeated similar answers by a number of students and faculty supported by improvement in grades seems to indicate this type of evaluation is useful to determine student gains in learning and/or writing. This method while not statistically rigorous,

Conclusion

A perusal of the professional literature on evaluation of Writing Across the Curriculum programs shows discussions related to those aspects that make a program successful. There is less information available in evaluating the results of the writing program itself. Collectively, the writing evaluators seem to say we know the programs make a difference, but we don't know how to demonstrate that difference with methodological rigorousness of a true experimental design.

There is support for the use in evaluation of a variety of methods related to observation and description(Davis, Scriven, Thomas, 1987; Guba, 1978; Parlett and Hamilton, 1976; Stake, 1974). Sipple(1986) presents the most concrete suggestion in the development of an evaluation matrix that uses a variety of methods.

In the final analysis, the crucial questions are "Did student learning improve?" and "Did student writing improve?" And if it did, how do we know that WAC courses were responsible even in part, for the improvement? Next, this paper describes the attempt at Walsh College to develop a summative evaluation for Stage One of the Writing Across the Curriculum program, using a variety of methods and planned with an evaluation matrix.

Methods

Eleven faculty members participated in the Stage One Pilot Project. Each faculty member selected one course to emphasize

does provide an evaluation based on the impressions of the participants. In a writing program, the attitudes and feelings of the participants may be an important attribute in achieving an effective program.

Results

Student Writing and Learning

Student writing and learning did improve. The most substantive support for the idea that writing leads to improvement in writing and in learning is provided by comparing evaluations of before and after writing assignments. For example, students were given the option of rewriting essays on exams to increase accuracy and understanding of core concepts. In all cases, content and writing did improve. Although no statistical tests of signifigance were calculated, the magnitude(as determined by the faculty point system of grading individual assignments) of the overall improvement in accuracy and understanding of concepts is such that the results would be highly significant. Before and after grades also indicate students did improve in areas of grammar, syntax, spelling and punctuation. For example, one instructor gave students the opportunity to rewrite an essay exam question. Students scores on that exam increased by 8.8 points. An other instructor indicated that grades changed from and average of C+ to B+ over the semester on writing skills. Corroborative evidence comes from comments by the students and faculty themselves:

I think that I understand better because I not only had to learn the material as I would have in class lecture, but I had to know the material well enough to be able to explain it.

I like the idea of writing in a person's major field of study because it is more relevant than writing for an English class.

I feel that everyone should take a class with writing requirements because I learned that if I understand the material it doesn't matter unless I can explain the material to someone else so that they(sic) can understand it, too.

I feel I learned how to better grasp the important points... and to use these points to support a thesis.

The writing can give students a new perspective...it forces them to think and interpret.

I put in a lot of time and effort...but I feel that really helped me. The writing through process was most helpful. Having someone point out my mistakes and allow me to try to correct these mistakes was very helpful.

I improved tremendously in my writing skills.

My writing style improved the most. This was due to the amount of practice we were given.

I have found that after every time I have turned back the corrected papers to the students following the first assignment there seems to be a definite improvement in the writing of the second and succeeding assignments of many of the students.

Faculty Assessment

According to the Spring 1986 Writing Survey, Walsh faculty were interested in improving their assessment of writing assignments. The use of evaluation forms was one way to achieve this. Therefore, as part of the Stage One program various grading forms were developed and used by faculty in various

disciplines. Both faculty and students comments indicated that evaluation forms were helpful to focus on certain areas for improvement. The forms provided a concise way to communicate information to students in a clear and logical manner.

Some students and faculty in some WAC courses were asked to comment on the use of grading sheets. Their comments indicate a positive experience:

> Evaluation forms helped me to know at a glance how I had done and areas to improve in future papers.
>
> They were an excellent source of feedback and helped me become a better writer.
>
> Made papers easier to grade
>
> Assignment of grade was less subjective in the area of writing.

These results are limited by the number of responses. Not all faculty used evaluation forms. Not all students and faculty were interviewed or asked for their written comments. Also the evaluation was not clearly focused from the beginning of the semester. As the program evolved so did the evaluation. Therefore information that may have been useful in determining change of students performance or attitude was not obtained. The information presented was selected as a cross section of the available information and was chosen to present the dominant viewpoint of the participants.

As Fulwiler(1984) suggests, there are various influences that effect writing. Also, changes in motivation may influence improvement in writing. As one student said: "I find the

realization of ideas and facts much more exciting." Another also reported a positive change: "...I was able to write with more confidence." In commenting on the use of evaluation sheets, a student wrote: "They stimulated the zeal to do better." Student attitudes and motivation were not considered in the plan for the evaluation.

Discussion

Despite the struggles with evaluation, the faculty involved certainly expressed in their written comments the positive experience they had. As member of the First Stage group, I feel we did develop as a community of scholars. We talked about writing, but we also talked about learning and teaching and our frustrations and what worked and what didn't. We started to trust each other for help. The artificial barriers of departments started to come down as we realized we are all about the same business.

We became much more aware of ourselves as writers. As one colleague wrote: "Being involved in this project made me more aware of my writing. I never did like to write in class as a student."

We also shared assignments. We learned something about teaching again. "...I am a better teacher than I thought, but that I had to learn to be a facilitator of learning, rather than a 'teacher.'"

The attitude of the faculty and students should be

considered if a college wide program is to be effective. This attitude can be discerned from the comments. For the most part, the faculty and students were receptive. Also other areas such as motivation, campus environment, the influence of the Writing Center should be included as part of the evaluation.

Faculty need to be actively interested and involved if Writing Across the Curriculum can affect students. Fears of the faculty concerning their ability to participate need to be addressed early in the process. For example, faculty concerns changed throughout the semester from how do I plan classtime to how do I make more effective assignments. Faculty were reimbursed for participation, which seems essential for the success of the program. The college needed to demonstrate that the writing program and faculty involvement in the program is important enough to pay faculty for participation.

In trying to answer the guiding questions, a needed area of research emerged: developing evaluation methods for this writing program. Two problems were evident. Terminology used in the guiding questions needed to be clearly defined. For example, in trying to answer the question "Did student writing improve in WAC courses?", expectations of improvement needed to be clearly defined and explained to faculty prior to implementation of the program. For example, improvement could be defined as developing excellence in grammar, spelling, punctuation, organization and/or communication of ideas.

The other problem that emerged concerned involvement of

faculty in evaluation. Most of the faculty in the pilot program had a liberal arts orientation and evaluation methods were somewhat unfamiliar to them, but without faculty support and understanding of the necessity to follow procedures to gather data, the ability to demonstrate the success of the program is questionable. Therefore, the evaluation team becomes a critical bridge that needs to be able to communicate to the faculty and has the knowledge to develop sound evaluation programs.

In summary, evaluation procedures need to be clearly defined and explained to faculty at the beginning of the writing process so appropriate and significant data can be gathered. Involvement and interest of the faculty is critical if WAC is to be able to demonstrate effectiveness. The evaluation members of the Writing Across the Curriculum Program need to clearly communicate to the faculty members definition of terms and appropriate ways to gather information. Although Fulwiler(1984) suggests that the writing workshops through the year are explorations rather than conclusions about what works, this perspective avoids the issue of evaluation. Despite the comprehensive nature of the evaluation needed for writing programs and the difficulties in obtaining significant data, evaluation of writing programs needs to be done. Evaluators may then be able to to say that we know the programs make a difference and we have the ability to demonstrate that difference.

Summary and Conclusion

Implementation of a Writing Across the Curriculum program has support through the theoretical and experimental literature of the field. Two areas of evaluation are discussed in the literature; the evaluation of the program itself and evaluation of improvement in writing. Walsh College has developed a program that addresses the issues discussed by Russell(1987), Morrow(1986), and others. However, there does seem to be a lack of information on how best to evaluate the success or effectiveness of writing as a result of a Writing Across the Curriculum program. Following suggestions from the team members familiar with evaluation, Walsh college developed a summative evaluation matrix similar to what Sipple(1986) suggests. For Stage One of the Pilot Project, Walsh College developed a chart of evaluation considerations that included various program components, information needs, information sources, evaluation techniques and analysis strategies. Three guiding question focused the evaluation. Although not exhaustive, the questions did give a way to evaluate the purpose of the program and provided needed support to the funding agency that progress was being made in developing excellence in writing. The guiding questions emerged as the semester progressed and this made obtaining some of the information difficult.

In attempting to evaluate the WAC program at Walsh College, my colleagues and I encountered many stumbling blocks and have more questions than answers about the effectiveness of the

writing program. This problem may account for the lack of information available in the literature about evaluating writing in a WAC program. Evaluation is difficult! As we began to evaluate, the enormity of our task became apparent and the number of factors that needed to be considered seemed almost overwhelming.

Development of the evaluation matrix helped to focus ar evaluation plan. The method we chose to evaluate the Writi Across the Curriculum program at Walsh College gave some interesting results. Other forms of evaluation need to be considered and tried. For example, faculty evaluations of student progress could be correlated with outside observers. Pre and post test designs with student writing samples could be devised. Surveys that determine both faculty and student attitudes about writing could be included.

Future WAC instructors need to plan evaluation as the first and most important part of the planning stage. Evidence is needed for ourselves, our students, the scholastic community and the continued financial support of writing programs. Educators need to know and to demonstrate that Writing Across the Curriculum helps to "foster excellence in education."

APPENDIX A

WRITING ACROSS THE CURRICULUM QUESTIONNAIRE

1. In what deparment do you teach? _____

2. Of the writing done in your classes, ungraded comprises what percentage?
   ( ) 0-25%
   ( ) 25-50%
   ( ) 50-75%
   ( ) 75-100%

3. Writing done in your classes comprises what percentage of graded material?
   ( ) 0-25%
   ( ) 25-50%
   ( ) 50-75%
   ( ) 75-100%

4. Of the writing done in your classes, check the types most often used.
   ( ) Essay questions on exams
   ( ) Research papers
   ( ) Abstracts or summaries of readings
   ( ) Journals
   ( ) Fiction/Poetry
   ( ) Themes
   ( ) Specialized writing in my disciplines. Examples_____

   _____

   ( ) Other Examples: _____

5. When you grade writing assignments, on what criteria do you base the grade? Number in order of importance, one being the most important.
   ( ) Creativity
   ( ) Organization
   ( ) Grammar, spelling, punctuation
   ( ) Quantity
   ( ) Improvement
   ( ) Style
   ( ) Accuracy of content
   ( ) Development of ideas

6. In the writing you receive from your students, what do you perceive to be their major problems? Number in order or importance, one being the most important.
   ( ) Developing logical connections betwen ideas
   ( ) Grammar, spelling, punctuation
   ( ) Forming original viewpoints
   ( ) Substantiating opinions
   ( ) Producing extended discourse on a subject. Students just don't have a lot to say about anything
   ( ) Awkward and twisted syntax
   ( ) Organizational problems

7. What impediments prevent writing from playing a larger role in your classes? Check as many as apply.
   ( ) None. Writing is already a significant part of my classes.
   ( ) I don't feel writing is a significant factor in my discipline.
   ( ) I have too many students.
   ( ) I don't feel confident assessing writing.
   ( ) The writing of my students is too poor. I can't bear to read more of it.
   ( ) More emphasis on writing would reduce the amount of material I would be able to cover.

8. With what modes of discourse do you feel graduates of Walsh College should have had the most experience? Number in order of importance, one being the most important.
   ( ) Personal experience narratives
   ( ) Business and technical writing (reports, business letters, memos)
   ( ) Expository essays
   ( ) Argumentative/persuasive essays
   ( ) Research writing in the students' majors
   ( ) Fiction/poetry
   ( ) Journals
   ( ) Ungraded exploratory writing

9. With what modes of discourse do you feel the majors in your department should have the most experience? Number in order of importance, one being the most important.
   ( ) Personal experience narratives
   ( ) Business and technical writing (reports, business letters, memos)
   ( ) Expository essays
   ( ) Argumentative/persuasive essays
   ( ) Research writing in the major
   ( ) Fiction/poetry
   ( ) Journals
   ( ) Ungraded exploratory writing

10. In what areas could you benefit most from a faculty development program in writing? Number in order of importance, one being the most important.
   ( ) Creating assignments relevant to my discipline
   ( ) Using revision
   ( ) Using writing to develop cognitive skills
   ( ) Using process in my writing assignments
   ( ) Improving assessment skills
   ( ) Developing a student centered classroom environment when writing
   ( ) Using peer evaluation
   ( ) Grading the final product
   ( ) Other: _____

11. Additional comments: _____

_____

APPENDIX B

WRITING ACROSS THE CURRICULUM: EVALUATION CONSIDERATIONS

PROGRAM COMPONENT	INFORMATION NEEDS	INFORMATION SOURCE	EVALUATION TECHNIQUE	ANALYSIS STRATEGIES
1. Undergraduate Student Performance in Writing	a. Did student writing improve in WAC courses?	b. undergraduate population in WAC courses	c. interview written comments grades	d. identify strengths and weaknesses of evaluation forms
2. Graduate Student Performance in Writing	Did student control of content concepts improve?	graduate population in WAC courses		identify types of improvement in student writing
3. Assessment of Evaluation Techniques Used for Writing Assignments	Were evaluation forms used to critique writing assignments effective?	faculty teaching WAC courses		identify types of improvement in student control of content written report

Sources Consulted

Davis, B.G., Scriven, M. &, Thomas, S. (1981). The Evaluation of composition instruction. Inverness, CA: Edgepress.

Emig, J. (1977). Writing as a mode of learning. College composition and Communication, 28, 122-128.

Flower, L. & Hayes, J. (1980). The cognition of discovery: Defining a rhetorical problem. College Composition and Communication, 31, 21-32.

Fulwiler, T. (1984). How well does writing across the curriculum work? College English, 46, 114-120.

Griffin, C.W. (Ed.). (1982). Teaching writing in all disciplines. San Francisco: Jossey-Bass.

Guba, E. (1978). Toward a methodology of naturalistic inquiry in educational evaluation. CSE Monograph Series in Evaluation, 8.

Morrow, S.R. (1986). Writing across the curriculum at selected liberal arts and technical colleges, 3, 8-9.

Parlett, M. & Hamilton, D. (1976). Evaluation as illumination: A new approach to the study of innovatory programs. In G. Glass(Ed.), Evaluation Studies Review Annual, 1, 147-148. Beverly Hills, CA: Sage.

Russell, D.R. (1987). Writing across the Curriculum and the communications movement: Some lessons from the past, College Composition and Communicationm, 38, 184-194.

Sipple, J.M. (1986). Planning: The first P of writing across the curriculum programs that last. Writing Across the Curriculum, 4, 3-6.

Sipple, J.M. (1987). Proposing, preparing, and prototyping: Three P's of Writing Across the Curriculum programs that last, 4, 3-5.

Stake, R. (1974). To evaluate an arts program. Current Issues in Education: A Symposium, 9, 13-32.

Young, R., Becker, A. & Pike, K.(1970). Rhetoric: Discovery and change. New York: Harcourt Brace.